

(Model.)

A. KELLEY.  
CORSET STAY.

No. 283,611.

Patented Aug. 21, 1883.

Fig. 1.

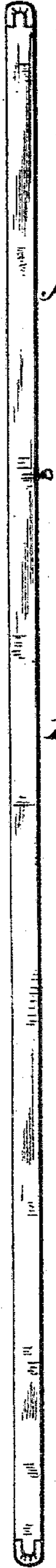


Fig. 2.

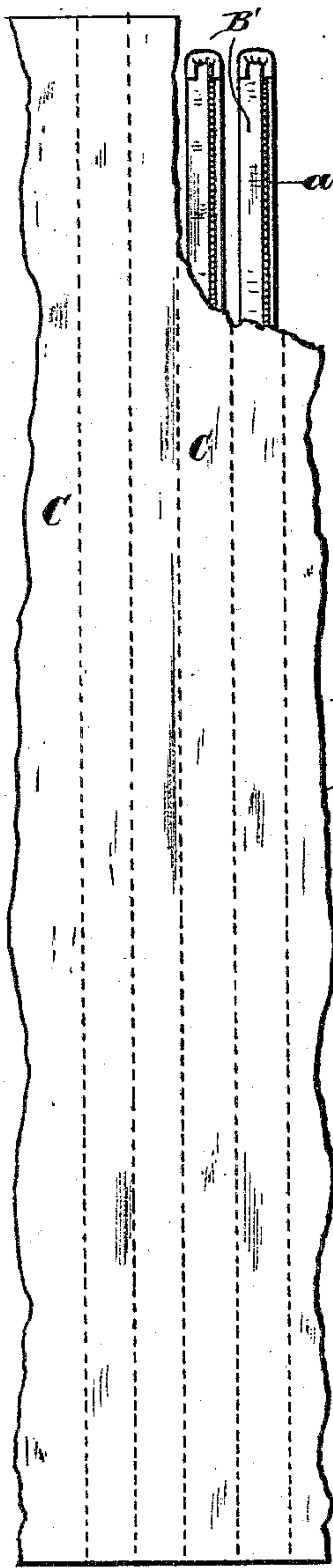


Fig. 1<sup>a</sup>.

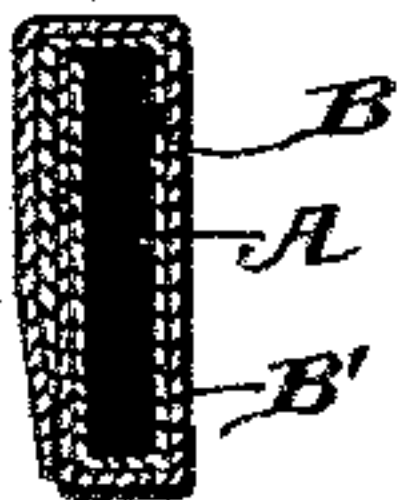


Fig. 2<sup>a</sup>.

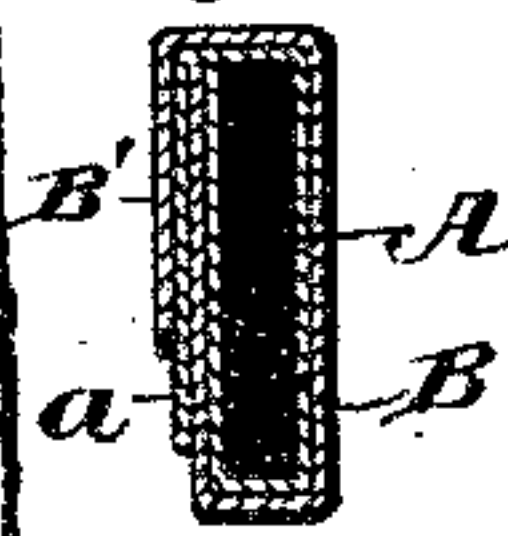


Fig. 3.

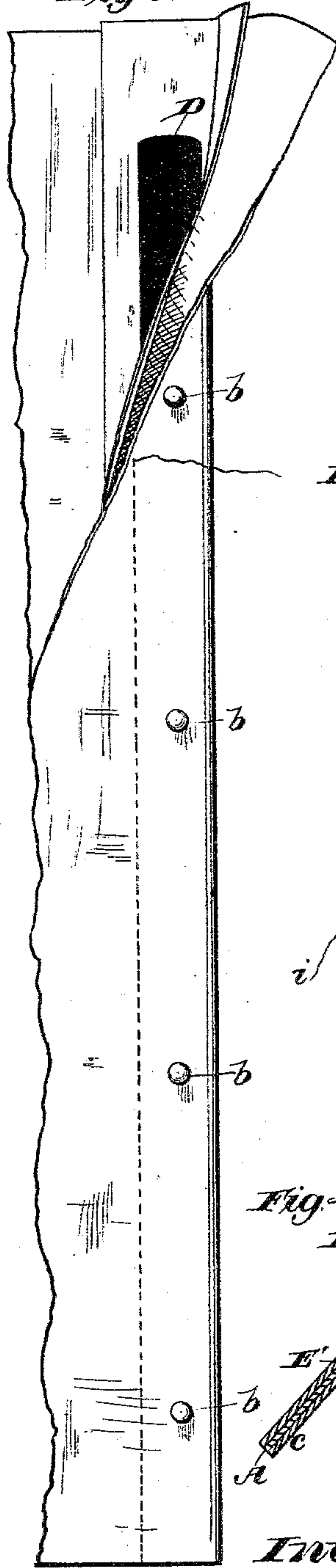


Fig. 3<sup>a</sup>.

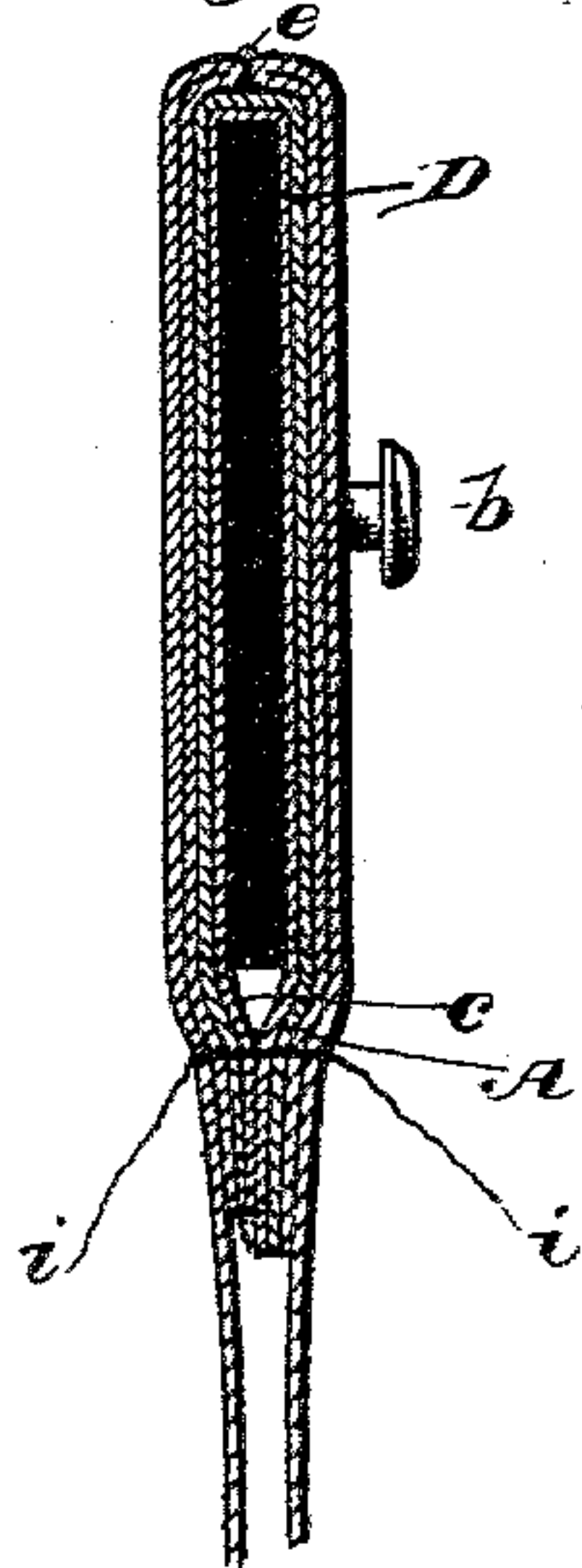
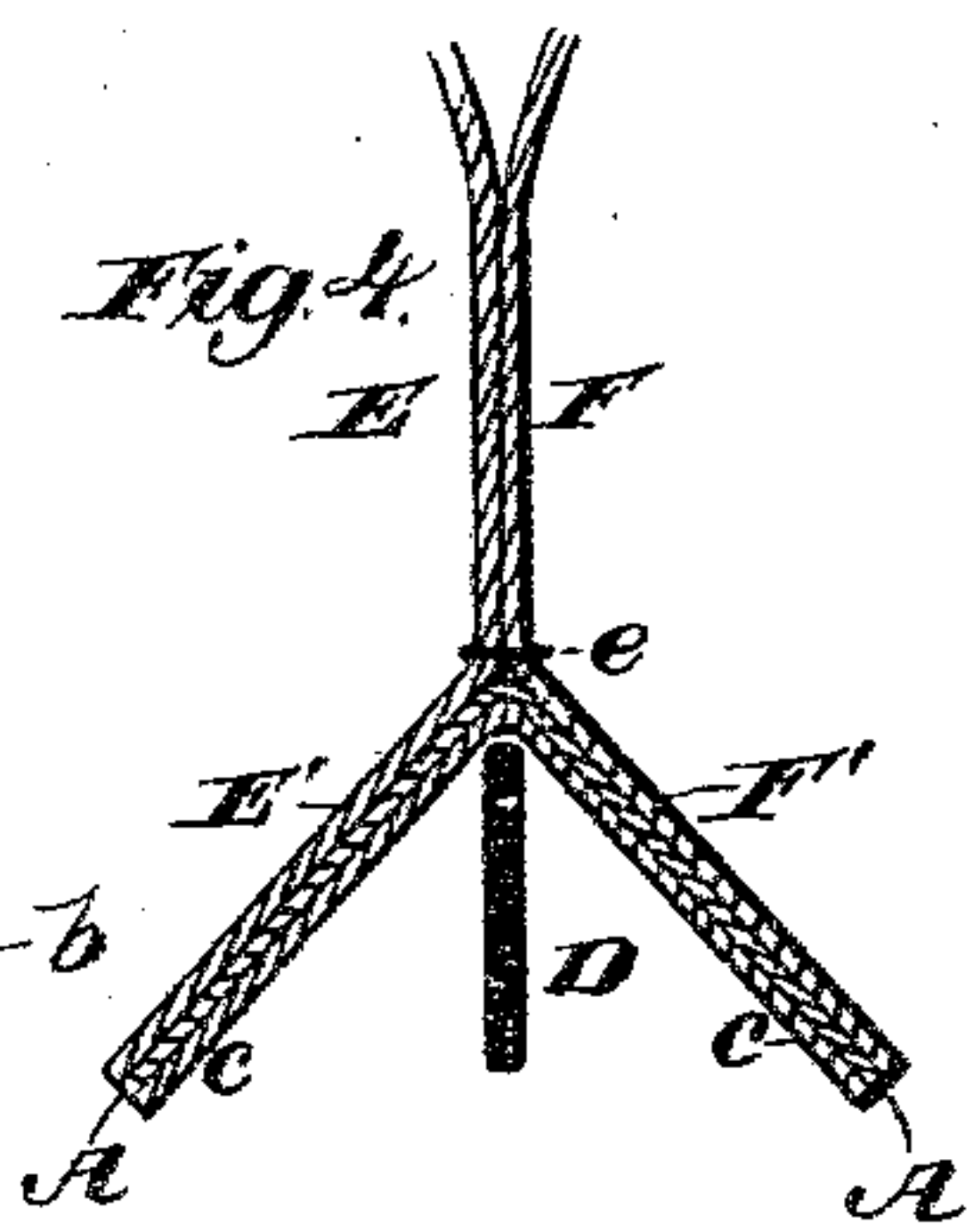


Fig. 4.



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By James L. Norris.  
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Witnesses.  
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# UNITED STATES PATENT OFFICE.

AUSTIN KELLEY, OF BROOKLYN, NEW YORK.

## CORSET-STAY.

SPECIFICATION forming part of Letters Patent No. 283,611, dated August 21, 1883.

Application filed January 11, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, AUSTIN KELLEY, a citizen of the United States, residing at Brooklyn, Kings county, and State of New York, have invented new and useful Improvements in Corset-Stays, of which the following is a specification.

My invention relates to certain improvements in corsets, bustles, hoop-skirts, and analogous articles; and it consists in a novel method of covering the stays, busks, or wires, whereby they are securely attached to the fabric composing said articles, and so securely and perfectly sealed therein as to exclude both the moisture of perspiration as well as the water used in cleansing the same, thereby obviating all necessity of removing said stays, busks, or wires, as well as avoiding the discoloration of the covering, caused by the gradual oxidation of the metal, caused by perspiration.

Referring to the drawings, Figure 1 is a view of a single stay covered with gutta-percha tissue according to my invention. Fig. 1<sup>a</sup> is a cross-section, enlarged, of Fig. 1. Fig. 2 is a view of a portion of a corset-body partly broken away to show two of the stays projecting. Fig. 2<sup>a</sup> is a cross-section, enlarged, of one of the stays exposed to view in Fig. 2. Fig. 3 is a rear view of a portion of a corset-clasp inclosed, a portion of the covering fabric being turned back to display the busk. Fig. 3<sup>a</sup> is a cross-section, enlarged, of Fig. 3. Fig. 4 is a section showing the method of stitching the body and applying the covering to the busk.

A in said drawings indicates a corset-stay, or it may be a bustle-spring or hoop-skirt wire, said stay, wire, or spring being made of metal in the usual form, the object of my invention, as already stated, being to not only so cover such stay, wire, or spring as to exclude moisture, but also to afford means for securely attaching the said parts to the fabric, of which they form component portions. I propose to accomplish both purposes in the manner following.

B indicates a fabric composed of a material known as "gutta-percha tissue," which consists of an extremely light sheet of gutta-percha, which is cut into strips of suitable length and breadth for my purpose. Upon this strip

of "tissue" I lay a strip, C, of any light textile fabric—such as common muslin or any equivalent material—and these combined in this manner are wrapped around the stay, the textile fabric, paper, or other material being outside, while the gutta-percha tissue is within and next to the metal stay. The parts being in this position and the two strips tightly drawn around the stay, heat is applied in any suitable manner, whereby the gutta-percha is immediately melted and driven into the interstices of the outer cloth or paper covering. The moment the temperature falls below the point of fusion the gutta-percha solidifies, and the result is a hermetically-closed seam or joint between the edges of the covering-strips, the remainder of the body of the stay being surrounded by the impervious covering already described. A convenient method of accomplishing this result is to pass the stay covered in the manner described between heated rolls, a groove being formed in said rolls of the necessary dimensions. By this method it will be seen that the fusion of the inner sheet of gutta-percha tissue will take place upon both faces as well as upon each edge of the stay.

In order to seal the stay in the manner described, and at the same time secure it to the body of the corset, I cut the strip of gutta-percha of such width with relation to the outer strip of textile fabric or paper that there shall be an edge, *a*, of the tissue which projects beyond the covering-strip B', of muslin or other fabric, as shown in Figs. 2 and 2<sup>a</sup>. The stays prepared in this manner are inserted in the pockets or bone-casings of the corset, as shown in Fig. 2, and a hot iron being passed over the surface, it is evident that the fabric C of the corset will be united to the projecting edge *a* of the gutta-percha, thereby sealing the several stays in place, while at the same time the covering surrounding each stay is effectually sealed, and the textile fabric and gutta-percha tissue composing it are united in one homogeneous material, as already described.

For the purpose of covering the corset-clasp, and at the same time attaching it to the material composing the corset, I adopt the construction shown in Figs. 3 and 3<sup>a</sup>. In these figures,



D indicates the busk, which is of the usual form and is provided with studs *b b*, &c. This busk is covered by an inner covering composed of a suitable textile fabric, *c*, and the gutta-percha tissue *A*, already described, laid outside the fabric *c*. The outer covering, which forms part of the corset-body, consists of a double layer of fabric, *E F*, stitched together longitudinally, as shown at *e*; Fig. 4. The edges *E'* and *F'* are then opened, and the busk *D*, with its covering of muslin or other fabric, *c*, next the metal, and a strip of gutta-percha tissue, *A*, outside, is inserted between said folds *E'* and *F'*. The folds *E F*, on the other side of the seam *e*, are then opened and turned over upon the folds *E' F'*, as shown in Fig. 3<sup>a</sup>, and a line of stitching, *i*, is run near the edge of the busk, so as to pass through the fourfold outer covering, as well as the inner layer of muslin and gutta-percha. The studs *b* are allowed to project through the material, inclosing the busk in the usual manner. The whole being subjected to heat from an iron, the seams are hermetically closed, although the stitching will ordinarily be amply sufficient to accomplish this result.

It is evident that this invention may be applied with equal advantage to hoop-skirts, bustles, and other manufactures, the great advantage being that by covering the wire or springs in the manner set forth they may be not only made to adhere securely to the fabric of which they form part, but also may be so sealed from the moisture of the body, as well as the water used in cleansing them, as to prevent all staining from the oxidation of the metal.

By fastening the stays in the pockets of the corset in the manner described I greatly increase the wear of the article. When the stays are applied in the usual manner, being loose in their pockets, they are apt to twist and work backward and forward in such a manner that

their movement will destroy the fabric composing the body of the corset before the ordinary wear by the person would become perceptible. This objection is wholly obviated by my invention.

Having thus described my invention, what I claim is—

1. The combination, with a corset-stay or other analogous article, of a covering of gutta-percha tissue, combined with an outer layer of fabric, the two being united and the lap closed by the application of heat, substantially as described.

2. A corset-stay covered by an inner strip of gutta-percha tissue and an outer layer of textile fabric, the former having an edge projecting beyond the lap of the latter and thereby exposed, as and for the purpose described.

3. The combination, with a corset having stay-pockets formed by stitching, of stays covered with an inner strip of gutta-percha tissue and an outer layer of textile fabric, the former having its edge projecting beyond the lap of the latter and exposed to contact with the inner surface of the pocket, to which it is united by heat, substantially as described.

4. The method hereinbefore described of covering corset-stays and sealing them in place in their pockets, consisting in covering the stays with a fabric composed of gutta-percha and textile material, leaving an exposed margin of the former, and, after inserting it in the pocket, applying heat, by which the exposed gutta-percha is fused into the material composing said pocket, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUSTIN KELLEY.

Witnesses:

JAMES L. NORRIS,  
J. A. RUTHERFORD.